

CNS Muscle Relaxants

Clinical Pearls for the Washington Rx Therapeutic Interchange Program (TIP)

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Background

In 2003, the Washington State Pharmacy and Therapeutics Committee (P&T), the agency directors of the Department of Social and Health Services-Medical Assistance Administration (DSHS-MAA), Labor and Industries (L&I), and the Health Care Authority-Uniform Medical Plan (UMP) declared baclofen, chlorzoxazone, cyclobenzaprine and methocarbamol to be the “preferred” CNS muscle relaxants for patients covered by their prescription insurance. Patients currently using “non-preferred” agents” must be evaluated for conversion to a preferred agent. Furthermore, patients presenting with prescriptions for non-preferred agents from “endorsing practitioners” (i.e., providers that have signed the TIP agreement) may be automatically converted to preferred agents by pharmacists once this program is operational.

Purpose

The purpose of this document is to inform pharmacists of the clinical, safety and cost rationale for these policy changes and to optimize their ability to assure safe and effective conversion of patients to the appropriate agents.

Washington State Evidence Based Preferred Drug List Preferred CNS Muscle Relaxants are:

| | |
|----------------------------------|--------------------------------|
| Baclofen (generic) | Chlorzoxazone (generic) |
| Cyclobenzaprine (generic) | Methocarbamol (generic) |

Overview

Skeletal muscle relaxants are a mixed group of medications that are used to treat two different types of conditions:

- 1) Musculo-skeletal conditions causing tenderness and muscle spasms include fibromyalgia, tension headaches, neck pain, or low back pain
- 2) Spasticity, a clinical condition characterized by increased muscle tone from such neurological conditions as cerebral palsy or stroke.

Currently Available Agents and Muscle Relaxant Applications

| For Muscle Spasm: | | For Spasticity |
|--|--|--|
| Carisoprodol (Soma [®]) | Methocarbamol (Robaxin [®])* | Baclofen (Lioresal [®])* Dantrolene (Dantrium [®]) Tizanidine (Zanaflex [®]) |
| Chlorzoxazone (Parafon Forte [®])* | Orphenadrine (Norflex [®]) | |
| Cyclobenzaprine (Flexeril [®])* | Quinine | |
| Metaxalone (Skelaxin [®]) | Tizanidine (Zanaflex [®]) | |

*Washington State Evidence Based Preferred Drug List Agents

Clinical Efficacy Summary

- All muscle relaxants are effective for muscle spasm *except* for **metaxalone**, which was not more effective than placebo.
- **Baclofen, dantrolene, and tizanidine** were as effective as diazepam for spasticity. Diazepam was not studied in this group as it is used primarily for symptoms of anxiety.
- **Cyclobenzaprine** has the largest body of evidence supporting its effectiveness.

Safety Comparisons

- **Carisoprodol** is a controlled substance in Oregon because of its potential for addiction.
- **Dantrolene** is associated with rare but fatal liver toxicity.
- Because of the potential for adverse effects, use of **tizanidine** requires that the patient’s liver function be monitored.

Evidence-Based Drug Reviews are available at <http://www.oregonrx.org>